Export of Technology

6011. SHRI V. NARAYANASAMY: Willi the PRIME MINISTER be pleased to state:

(a) whether Government's attention has been drawn to the news item appearing in 'Hindustan Times' dated 26th March, 1994 under the caption "India emerging as a big exporter of technology";

(b) if so, whether India is able to transfer indigenous technology to the USA, UK, Germany, Canada, Australia South Africa and other countries; and

(c) what is the total amount of foreign exchange Government earned by export *al* such technologies?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE AND MINISTER OF STATE IN THE DEPARTMENTS OF ATOMIC ENERGY, SPACE AND MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI BHUVNESH CHATURVEDI): (a) to (c) Yes, Sir. As reported in the News Item, National Laboratories/Institutes working under the segis of CSIR have succeeded in earning around Rupees Three crores during 1993-94 by way of transfer of indigenous technologies to the USA, UK, Brazil, South Africa, etc. The technology transfer took place mainly in the areas of drugs, chemicals, cataiysts, polymers, biotechnology and equipment & machinery.

Launching of indigenonsly developed Cryogenic payload by ISRO

6012. SYED SIBTEY RAZI; Will the PRIME MINISTER be pleased to state:

(a) whether it is a fact that the Indian Space Research Organisation (ISRO) has recently launched some indigenously.developed cryogenic payload;

(b) if so, the deteils thereof with backgound behind it;

(c) whether this launching has some objectives;

(b) if so, the details thereof;

(e) whether country can lead some progressive path with this launching; and

(f) if so, the details thereof and if not, the reasons therefor?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE AND MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE IN THE DEPARTMENTS OF ATOMIC ENERGY AND SPACE (SHRI BHUVNESH CHATURVEDI): (a) and (b) Yes, Sir. The Indian Scientists from the Physical Research Laboratory (PRL), Ahmedabad of the Department of Space (DOS) have launched an indigenously developed cryosampler experiment/payload in a balloon flight from the National Bal loon Facility, Hyderabad on April 16, 1994. The balloon having a volume of 150,000m3 was sruccessfully launch ed carrying the cryogenically cooled gas sampler payload. The experiment collected air samples from pre-determined heights (during the ascent and decent) of the balloon reaching a ceiling altitude of 37km. The payload consisted of 16 samplers or probes which collect air samples under liquid neon temperatures maintained within this payload system. The development of the experiment was taken up as part of ISRO's Geos-phere-Biosphere Programme (GBP). The purpose of this development is to collect the gas samples for analysis of the trace gas concentration pro. files in the lower and middle atmosphere. These trace gases include chloroflourocabons, carbon dioxide, methane etc., which play vital role in the phenomena of ozane deple-■ tion and global warming.